GULFSPAN SURVEY METHODS

All participating institutions modeled fishery independent surveys after those developed by Carlson and Brusher (1999) to provide a direct comparison of abundance among areas. A gillnet consisting of six different mesh size panels is used for sampling in all areas by all participants. Stretched mesh sizes range from 7.6 cm (3.0") to 14.0 cm (5.5") in steps of 1.3 cm (0.5"). Each panel is 3.0 m (10 ft) deep and 30.5 m (100 ft) long. Panels are strung together and fished as a single gear. The gear is randomly set within each area based on depth strata and GPS location.

Captured sharks are measured (pre-caudal, PCL; fork, FL; and stretched total length, STL in cm), sexed, and life history stage assessed and recorded (young-of-the-year, juvenile, or adult). Sharks in poor condition are sacrificed for life history studies and those in good condition are tagged and released. Captured rays are measured in disc width (DW in cm) and sexed. Because of the limited life history information for most ray species, a life history category could not always be assigned.

For each set of the gear, mid-water temperature (^{o}C), salinity, and dissolved oxygen (mg l^{-1}) are recorded from a YSI Pro 2030 environmental meter. Average depth (m) is calculated using gear start and end points recorded from the vessel's depth finder. Water clarity (depth of the photic zone) is measured by secchi disc (cm) and qualitative habitat type (e.g., mud, sand, oyster, etc.) is determined by personal observation or previously documented literature.

Catch-per-unit-effort (CPUE) is used to assess abundance of each species-life stage in each area. CPUE for each species-life stage is defined as the number individuals caught divided by the soak time of all sets (CPUE = animals caught per net hour). A set is defined from the time the gear enters the water to the time the gear comes completely out of the water. Nets are typically fished between 0.5-1.0 hours.